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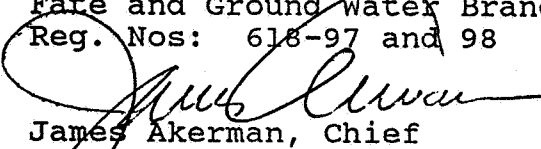
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

November 3, 1989

SUBJECT: Request for EEC Calculation from Environmental
Fate and Ground Water Branch
Reg. Nos: 618-97 and 98

FROM:  James Akerman, Chief
Ecological Effects Branch
Environmental Fate and Effects Division H7507C

TO: George LaRocca, PM 15
Insecticide/Fungicide Branch
Registration Division H7505C

The EEB has been asked to reevaluate potential risk to nontarget organisms from the use of avermectin on citrus and cotton. The registrant, Merck, has questioned, among other things, the environmental fate values we used to calculate estimated concentrations in aquatic habitat due to runoff. In this submission they have proposed several label restrictions intended to reduce potential exposure to both terrestrial and aquatic organisms. One such mitigating measure is to reduce the number of repeat applications per season, and specify a minimum between harvest interval.

The EEB is requesting that you provide the current labels and proposed label modifications to EFGWB so they can generate an EEC using the appropriate environmental fate information. This EEC should be for cotton grown in Texas, with maximum use rates as indicated on the label and the minimum between treatment intervals. Calculations should be for both aerial and ground application. Exposure concentrations in both the water column and sediment should be provided beginning at the first application and continuing for at least 1 month following the final application.

The registrant has also proposed buffer zones around water bodies to reduce potential for transport of avermectin to aquatic habitats. However, the EEC should be generated assuming that treatment occurs right up to the edge of the water body without considering the proposed buffers.

If any questions arise, please contact Dan Rieder (557-1451).